

**Supplementary Appendix****Table S1.** Accuracy of pelvic examination, ultrasound and MRI for the measurement of tumor size based on pathological measurement.

	Different Error Range			Tumor Size (Mean $\pm$ SD, cm)	p
	$\pm 0.3$ cm	$\pm 0.5$ cm	$\pm 1$ cm		
Pathological measurement	-	-	-	0.95 $\pm$ 0.75	-
Pelvic Examination	24.30%	35.70%	71.40%	0.45 $\pm$ 0.78	<0.001
Ultrasound	33.60%	44.50%	77.40%	0.37 $\pm$ 0.65	<0.001
MRI	41.50%	54.40%	84.50%	0.91 $\pm$ 0.84	0.914

Abbreviation: MRI, Magnetic Resonance Imaging

**Table S2.** Characteristics of patients with recurrent disease

Surgical approach	Age	Histology	Grade	DSI	LVSI	Time to recurrence (months)	Site of recurrence	Follow-up (months)	Outcomes
Open surgery	64	SCC	N/R	No	No	16	Pelvis	65	DED
	71	SCC	III	Yes	No	39	Vault	43	DED
	63	SCC	I	No	Yes	15	Vault	21	DED
	53	SCC	III	No	No	7	Vault	37	Alive
	55	SCC	N/R	No	No	26	Distant	53	Alive
Laparoscopy	49	SCC	II	No	No	14	Pelvis	24	Alive
	46	SCC	I	No	No	15	Vault	92	Alive
	44	SCC	III	No	No	7	Vault	26	Alive
	44	AC	II	No	No	50	Distant	57	DED
	64	AC	III	No	No	44	Distant	52	Alive
	54	SCC	II	No	No	38	Distant	47	DED
	36	SCC	III	No	Yes	55	Distant	55	Alive
	60	AC	II	No	No	9	Distant	25	DED
	48	NEC	N/R	No	No	12	Distant	19	DED
	59	SCC	II	No	No	8	Distant	28	Alive
40	ASC	I	No	No	31	Other	45	Alive	

Abbreviations: SCC, squamous cell carcinoma; AC, adenocarcinoma; ASC, adenosquamous carcinoma; NEC, Neuroendocrine

carcinoma; N/R= Not reported; LVSI, lymphovascular space invasion; DSI, deep stromal invasion; DED, died of disease